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Beef cattle
production in Quebec

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Editor

Mark W. Waldron, Ph.D.
Macdonald College

Editor, Macdonald Reports
Gordon Thomson
Office of Information

Associate Editor
Tom Pickup

Office of Information,
Quebec Dept. of Agriculture
and Colonization

Hib Saunders
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Dorothy Parsons
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COVER: Beef Production should be intensified in the province of Quebec. However standards for evaluation will have to be changed accordingly. Dr. E. Donefer and Dr. C. Bernard give their opinion on the subject.

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an elixir for agriculture

In our modern society, when someone is suffering from an illness, he seeks the professional help of a physician. The physician examines the patient and by a deductive process relates the patient's symptoms to a particular disease. The physician then prescribes a medication to ease or remedy the disease and thus cure the patient. But what happens when the ailing victim is our province's gigantic agricultural enterprise?

First of all, we must examine the subject. Upon examination we find that there has been so much public wailing about the petty problems of Agriculture in recent years that another major problem has been created, resulting in a general lack of interest concerning the Agri-business industry.

Before we can prescribe an elixir or a cure for this problem, which has been one of the most pertinent and least understood problems of the people of Quebec, we must have a better understanding of its causes.

A primary cause of the problem, I feel, of the lack of interest is the fact that the public in general still has a 50-year-old concept of agriculture. They fail to see that Quebec agriculture has advanced more in the past 20 years than in all prior years in our history and *is no longer confined to the fence lines of the farm.*

Today agriculture is still the nation's largest single industry and is vital to our continued economic and social stability. The production, processing and distribution of food employ almost one-third of our labor force.

Agribusiness is a field of unlimited

opportunity for those young men and women who seek a rewarding career and have the ability and desire to work. Hundreds of new jobs have been brought about as a result of scientific and technical advances. The Agribusiness industry is actively seeking college-trained persons to fill these jobs, but because of the antiquated conception of agriculture on the part of the general public, less than one-half the number of needed college graduates enter the Agribusiness industry.

A second cause of today's lack of interest and enthusiasm is basically political. A politician is defined as a person who gets things done for the good of the people. Indeed our politicians have studied the problem of farm income stabilization, discussed the situation, formulated opinions and introduced and passed legislation which they felt would help insure the stability of farm income.

Unfortunately, these programs have failed to solve the problem. But what is even more depressing is the fact that many of our farmers lack the initiative to take constructive action to solve their own problems and are content to sit back and let the government do their bargaining for them. *Thus our agricultural abundance, which should be our greatest blessing, has become our greatest problem.*

We should prepare ourselves to provide the necessary leadership to resolve the problems of agriculture rather than continue the senseless complaining which intensifies, instead of solving our problem.

Louis A. Bernard
Agronomist

beef production in Quebec: is it feasible?

by E. Donefer
Department of
Animal Science

The problems facing dairy and beef producers appear to be at opposite ends of the spectrum. In the case of dairy farmers, there is strong indication that only those who are able to greatly increase their efficiency will be able to successfully continue in the business. Surpluses of dairy products together with increasing competition from substitutes puts an increasing squeeze on the dairy producer. As events of recent months indicate the "problem" facing beef producers is one of just not having enough of their product to sell. In fact the results of various surveys have indicated that per capita beef consumption will continue to rise and that beef producing enterprises will have to expand to keep up with demand.

Why then, with one of the largest population centers of Canada in their

midst, have attempts to produce beef in the Province of Quebec been largely unsuccessful? Some grandiose schemes for "local" feedlot operations have not succeeded and many potential beef producers have been reluctant to get their feet wet. Members of the Animal Science staff at Macdonald College have been receiving an ever increasing number of inquiries as to what it would take to get started in the beef business. There has been no simple answer to this question and too few pioneers to point out as someone who licked the problems and has made it.

Too often what is attempted is to try and model a Quebec beef enterprise after what has proved to be a successful feedlot operation in the more western parts of North America. Superior beef feeder cattle fed on corn and barley-based rations will grow



Cuts on one side originate from an Angus steer and on the other side from a Holstein steer of approximately the same live weight. These animals were in the College feeding trials and received corn silage (full-fed) plus a daily protein-mineral-vitamin supplement during the entire feeding period. Which steer is on which side? (It's the Holstein on the right). It graded as "commercial" (No. 4) and the slightly thinner external fat cover is obvious particularly in the upper photo. Perhaps the only other "give-away" is the slightly larger bone as indicated in the bottom photo of the full rounds. Beef from the Holstein appears as "meaty" (if not more so) as the Angus which graded as "good" (No. 2). As most Angus from our trials tend to grade choice (No. 1.), the slightly darker color ("dark cutter") of the meat from this steer may have resulted in downgrading. Cuts on the right thus represent "local" beef produced from "local" feeds which should be able to have some potential in feeding some of the "local" people.



beef production in Quebec

(Continued)

very well with expected gains of 2-1/2 lb a day and over but these same animals will probably be a money-losing situation when the feed costs required to make these gains are considered. For feeder cattle and feed grains which originate in the west, the best place for the feedlot is at home, since it is probably more feasible to ship the finished product east (dressed beef) than all the "raw" materials.

Can beef be profitably produced in Quebec? If local cattle and feed can be largely utilized, the answer to this question should be positive. Local in reference to cattle could refer mainly to those black and white animals which seem to be able to do a good job in producing the "white" product. What is their potential as beef producers? Local in regard to feed usually refers to forage crops, which seem best adapted to eastern topography and environment. What is the potential of forage crops in a feeding for beef program?

To try to demonstrate some of the answers to these questions, beef feeding trials have been conducted over the past four years in the facilities that became available after major renovations were made to College barns. I deliberately say demonstrate rather than research since trials in other areas of North America, particularly in the U.S., have given a good indication as to what the answers to the questions raised might be, leaving them to be tested under local situations.

Our feeding trials have followed a general pattern. Pens of eight calves averaging 450-500 lb have been placed on trial in late fall and sent to market the following summer. Half the animals in each pen have generally been Holsteins ("grassers" shipped into the Montreal market from the Maritimes) while the other half have represented some of the traditional beef breeds (Angus, Hereford). A limited number of crossbreds (dairy x beef) have also been tested. The feeding program has basically been the same in each of the years. From the start of the trial until slaughter the cattle have been given all the corn silage they will consume. The only other feed used was a supplement fed at the rate of 2-3 lb per head per day, which contained sources of protein, minerals and vitamins. The type of supplement used for different pens has varied as one of the objectives of the trials has been to test different sources of protein (soybean meal, urea, and dried poultry manure). This feeding program differs from traditional ones in one major respect, no grains were fed, even in the period prior to marketing the animals when cattle are generally "finished" on a high grain ration. What then were the results of these trials?

The average growth rate for all cattle was slightly over 2 lb per day, not as high as can be achieved for high grain rations but at a feed cost of about 14c per pound gained compared to 20c per pound and over when corn or barley constitute the major part of the ration. The Holsteins gained as

well (if not slightly better) than the beef breeds.

What happened at the slaughterhouse? All beef breeds graded as No 1 or No. 2 (choice or good), an unexpected result since no "finishing ration" was used. Holsteins generally graded as No. 4 (commercial) not unexpected since the present grading standards are stacked against animals not carrying an appreciable fat cover. Assuming that grading standards will not be changed in the near future, what was the economic disadvantage of the lower grading Holsteins? The average differential between grade 1 and 4 was 5c per pound (dressed beef), so that a 500 lb dressed Holstein carcass brought us \$25 less than the same size Angus or Hereford. This discount would be absorbed if the initial 500 lb liveweight Holstein feeder calf could be purchased at 5c less per pound than a beef breed feeder calf.

Meat samples from all animals were brought back to the College for chemical and taste panel tests. Although the results of these tests are not yet completed, it was clearly indicated by many participating that young dairy beef is a highly acceptable product.

Many questions still remain unanswered. How young can a calf be placed on a high silage ration? To what extent can grass and legume crop silage and haylage substitute for the corn silage? What are the relative advantages or disadvantages of "beefing" rather than "vealing" a dairy calf? Other points seem clear. The corn silage should contain at least 30% dry matter if gains of over 2 lb per day are to be realized. (How many farmers actually know what the dry matter content of their silages is?) A protein-mineral-vitamin supplement must be provided since the corn silage can only be depended upon as a source of energy.

With the active support of the Quebec Agricultural Research Council we would plan to continue and hopefully expand our trials to further demonstrate that local cattle and local feed can be used to produce Quebec beef.

our beef industry will it survive?

By Dr. Camille Bernard,
superintendent
Experimental Station
Canada Department of Agriculture,
Lennoxville, Que.

A Question Demanding new
Thought!

THE RAISING OF BEEF CATTLE IN QUEBEC IS IN VERY POOR HEALTH. THE AUTHOR GIVES HIS DIAGNOSIS AND PRESCRIBES SOME REMEDIES TO CURE THE ILLNESS; BUT HE WARNS THAT THE REMEDIES ARE BITTER AND THOSE INTERESTED MUST TAKE THEM TO SURVIVE.

Writing an article on beef cattle should be easy. Everyone knows its product, meat, of which the annual per capita consumption in Canada is eighty pounds. Every one knows that the packing industry, the third largest in the country, depends on beef for the major part of its operations, and that grass, the principal feed in raising beef cattle is grown throughout Quebec. Still certain aspects of agriculture are being scrutinized closely. Its forseen progress is impeded by certain problems, the largest being incurred by modernization. By tradition the raising of beef cattle comprises the management, the feeding and the classification of cattle into breeds distinct from each other in colour and size. In North America and specifically in Canada these groups are Hereford, Angus and Shorthorn.

Popular Beliefs

By word of mouth and by literature we have made objects of appreciation of these breeds and have associated them with the high quality of red meats. We even oriented in the slaughter houses the appreciation of the carcasses of these privileged breeds.

We have acquired the firm conviction that these animals Hereford, Angus and Shorthorn were transforming more efficiently than other cattle their feed into edible meats. As far as exhibitions are concerned, the classifying of animals supposedly destined for the production of meat is greatly influenced by the breed and their pedigree.

This is our general philosophy concerning beef cattle. It is time to revise this attitude and conception. Two fundamental reasons command it.

1— We must realize that the breeds of beef cattle and the industry deriving

from them are entirely dependent on the *consumer* and they must meet his standards. *The consumer's sole interest in the business is to satisfy his needs.* He doesn't worry or want to know where the animal came from, what breed it was, or how it became a roast, a steak or any other cut of meat.

2— The breeder becomes more and more conscious of the fact that the beef cattle industry is an enterprise which on its own merits must have economical advantages to sustain the competition of other agricultural productions. If in hours of work and dollars invested, the profit is less with the breeding of cattle than with a competitive production, maintaining the production becomes artificial and its future development is likely to become jeopardized. If, on the other hand, it compares to or is more profitable than other productions in terms of returns it will survive and prosper.

We must again question our way of thinking how on one hand he achieves this goal, and on the other hand, the breeder must meet the needs of the consumer by resorting to techniques offering economical stability. Let us analyze the points of the traditional way of breeding beef which have to be rethought and the alternatives offered to the breeder to correct a situation, to rectify the methods and to bring them to light if need be.

Purebred Breeding:

What is a purebred animal?...

Isn't it simply an animal registered in the National Records, an animal for which a paper has been prepared tracing its ancestry back to the second or third generation?...and that is all! For certain breeds this guarantees the location of white and red hairs, while with others it is not even that.

As long as we maintain purebred breeding solely for the purpose of ancestry identification, without regard to production capacity, we must refuse to see any future sense for it. Would it not have been more sensible and useful to establish a criteria of aptitudes based on the best performance of the breeds?

Breeders of other breeds have done this to revise their industry and their initiative has been an element of progress. It is to be noted that the

breeders of the new swine breeds have recently admitted that mixed blood could be introduced into a breed and it could be maintained as such if it resulted in an improvement of the breed. Such a technique may not be necessary in the beef industry, but the progressive breeder should be aware of the possibility factor and not reject it blindly.

Purebred Breeder:

By tradition we define a purebred breeder as one who keeps and maintains purebred animals. Here again we must underline a deficiency that hinders the whole industry. Is it not reasonable to expect the purebred breeder to be the guardian of pure stock, the promoter of their improvements and the promoter of their utilization, while favouring the most economical production of the desired product for the consumer? The pure stock should be considered an improving factor in the breeding of commercial stock and not as a valuable commercial subject in itself.

It is normal that pure stock should be limited in numbers and that they have a value as an important part of a commercial program. Is it so in the beef herds kept for the packing industry which in reality are the pure stock of the beef cattle industry? Are the purebred breeders in Quebec, the principal promoters of development of the beef cattle industry? Are they the pioneers of new techniques to improve their herds? How many have selected their animals according to performance testing, or have brought their animals in keeping also their proof of progeny in mind?

The purebred men are the keepers of superior stock for the breeder of commercial beef. Have they given official recognition to these breeders; have they kept record of their progress and adjusted their breeding program according to the needs of their customers? It would be surprising if many purebred men could answer to the affirmative, having found a logical and honest solution to the questions asked here.

THE SHOW RING STANDARDS:

It is well known fact that the pinnacle of success for a breeder of beef cattle, especially a purebred breeder, is the winning of a first prize or championship in a national category fair. In the past we found that such competitions had some value. *Some claim their success originated from this source.* It is now time to review the

opinions and the facts that the standards of appreciations in the arena as they exist today, cannot be used seriously to any extent by the purebred breeder, who is interested in improving his beef cattle stock. Let us then use the exhibitions for a purpose in which they can be useful. Many are still likely to be useful, if only to inform the public on the origin of the products which they favor with such delight. But let us stop disillusioning ourselves and pretend that the exhibitions present the best animals and that the Sherbrooke exhibition and others will save and develop the beef industry. Exhibitions have a role to play. Let us use them, but for their real values.

The Feeding Systems:

The beef cow is a ruminant. That is to say it takes a raw product and transforms it into a product well suited for human consumption. By tradition, we convinced ourselves that this product is ideal for human consumption, notably the roasts and steaks, could not be obtained without the animal eating a certain quantity of grains. We have accepted this belief, without researching other possibilities.

Actually, the economical implications force us to open our eyes, and realize that feeding massive quantities of meal and concentrates to beef cattle constitute an awful waste. If we had taken the consumer into consideration earlier and if we had not been blinded by our eccentricities of our own techniques, our expensive grains would have been better utilized and our beef production would not be in such a bad situation. Many other outmoded aspects of our traditional beef production could be discussed and modified to assure a new start in the raising of beef cattle. However let us take a step forward. Let's establish the promising options that are likely to replace our outmoded practices.

What should be done

1— First our beef production needs a limited number of progressive breeders to perpetuate, and improve their pure stock or the animals they start off with. Why a limited number?... Because each breeder should be important enough to carry on efficiently and they should number just enough to provide for the commercial breeders only.

These breeders of elite stock should have recourse to all techniques available to improve the production of their commercial beef cattle herds. We

refer here to techniques such as the control of aptitudes for rapid growth, the economical conversion of feed and the testing of progeny to locate the subjects likely to yield a desirable carcass. The registration of these animals should be more descriptive than they are at the moment. They should indicate the possible value of the animal if used as recommended. The value of the animal with regard to purebred stock is incidental, since its main purpose is to incorporate itself into a program to improve the production of beef cattle.

2— The producer of commercial cattle should aim to supply to the consumer with the products demanded at the lowest possible price, without regard to changes in the actual methods compared to those of the past. It is without a doubt that the commercial breeder should take advantage of crossbreeding. In fact it is more and more logical to think that the commercial beef cattle of tomorrow will come from animals resulting from crossbreeding! Therefore to obtain the final commercial product, the breeder of commercial beef cattle should keep a herd of cross bred cows, which he will mate with males suitable for crossbreeding for his own particular need. **TO BE MORE SPECIFIC, IT SEEMS MORE AND MORE CERTAIN THAT IN HIS BREEDING PROGRAM, THE COMMERCIAL BREEDER OF TOMORROW WILL USE CATTLE THAT ARE NOW RECOGNIZED AS DAIRY COWS. THE BASIC STOCK WOULD COME FROM PURE BRED ANIMALS AND WOULD BE CHOSEN FOR THEIR PERFORMANCE AND NOT BY THEIR name, size or class at the exhibitions.**

3— The exhibitions would recruit their supporters among the commercial producers and they would serve educational and extension purposes. They would then have a real value. Their standards would comprise requirements other than those regarding visible characteristics. They would record the production of the end product most in demand by the consumer and the methods judged most economical to the producer himself.

4— The beef cattle is a poor transformer of feed into meats and it will remain as such for a few years to come. It is a fact that we must take into consideration in their feeding. If we want to feed more and more peo-

(Continued next page)

the agronomist in a changing agricultural community

our beef industry (Continued)

ple from the same cultivated surface, we will have to supplement as much as possible the feed for human consumption with vegetable products from which they can draw the nourishment needed, for example cereal grains, and feed the beef herds with crops not directly usable by man, such as hay or silage. In this regard we are not yet convinced that the cultivation of grain corn in Quebec justifies the establishment of feedlots to finish cattle before shipping to market. In a combined program, the idea is not admissible because we have a large poultry and hog population which for the most part depend on a ration of corn, for which Quebec imports from other provinces large quantities of concentrates. In the long run beef cattle will better serve the cause of humanity if they are fed on hay and silage rather than on grain.

Now, the production of beef cattle is in a state akin to senility. There exists many rejuvenating elixirs capable of enlivening it. Although these remedies are without flavour during treatment, they can assure the survival and prosperity of the beef production. Its fate is in the hands of the breeders. We have reason to believe that the wisdom that inspired the adaptation of the agriculture of yesterday to today's requirements will again serve the best interest of producer of beef cattle of Quebec.

The following is a translation of the personal reflections expressed by Maurice Hardy, Technical Director of The Quebec Fertilizers Inc., during the presentation of his annual report to this professional organization of Fertilizer Manufacturers and Distributors. Mr. Hardy opened his remarks by stating that in order for professionals to participate in a changing agriculture they will have to take action based on applied science and the extension methods based on field demonstrations.

"Agriculture progresses on a daily basis like all other human activities. This progress is imperceptible. One has to stand back at some distance to widen the perspective in order to recognize the changes. Are professionals only witnesses of these changes and from this basis followers of the new direction or rather should we also be involved in creating changes? By our reply to this question we are in effect pointing out the implied responsibilities of those who think they have a word to say in giving guidance for change.

Moving a large group such as the farmers of Quebec cannot be done by one individual even if we think that movement is desirable. However this group will make changes if it feels the need and if those who wish to create change are motivated by a strong desire to give direction and guidance in a clear way, and by calculated steps, to achieve a recognized improvement. The surest improvement for agriculture is one planned and chosen by those who are conscious of the catastrophic consequences that sooner or later result when a farmer has had bad advice.

Improvements of conditions at the farm level should not be planned for the year 2000. Each day we must try to participate in this improvement which should take root immediately to remain and bring forth in the early future better operators than are leaving farming today.

No one can boast of being universal when it comes to agricultural knowledge. At the farm gateway, we are at once face to face with another phenomena. On one hand, we have a single man, the farmer who is responsible for an operation requiring a whole set of activities some of which must be decided upon very quickly.

This assessment must incorporate what he has heard from the seed specialist, the fertilizer specialist, the farm management agronomist, field crop specialist, bank manager, machinery salesman, the veterinarian, etc...

There are a dozen specialists or pseudo-specialists, each, in his turn, trying to convince the farmer to change his concepts. They tell him: be a better producer, have a more agreeable standard of living, live more quickly, improve your soils, modernize your equipment, increase your debts (being at once better financed), establish records on each of your farm activities and following this, determine which are the financial weaknesses and what are the profitable parts of this enterprise.

Sometimes one does not hesitate to contradict the other...one does not seem to realize that the farmer will pass judgment and that it is he in effect who is the strongest link!

There are so many things to consider when giving guidance to agriculture and increasingly this search for rational orientation requires collaboration. Yesterday's farm was simple and to today's we have to add complicated decisions, and that of tomorrow will be automated. Long range decisions or a process of group decisions will require computer programming.

Who some day, will take credit for having built this new agriculture? Everyone will have to take part. Everyone will have to have wanted it, taken part in preparing for it, guided it within the limits of his own small contribution. Giving direction and good guidance to agriculture is everybody's business, ours as that of the University, that of the Department of Agriculture and Colonization as that of Industry and Commerce, Federal Experimental Farms, the Extension Services, Manufacturers, those responsible for Demonstrations, Researchers and Men of Science.

Let us not forget that this will be in no small part the business of the farmer ... also.

Daily, everyone, each in his own way, supports him directly or indirectly. Daily, our members hear people talk about him. His pulse is even felt in the heart of the city. He tells us of his financial fears. He often greets our

(Continued on page 11)

if you ask me

by Marjorie M. Jenkins,
School of Food Science



Women, and men too, often bring questions about textiles to me. Here I have gathered together a few answers. If you would like to send your questions to the Journal, I shall be happy to add to the collection.

What is Qiana?

Qiana is a new nylon, engineered to imitate silk. The first fabrics made were shown to ten men from real silk mills. They were offered a magnum of champagne if they could tell which fabric was Qiana and which was silk. Only three magnums were won, and two of these by men who recognized their own silk prints. A grain of salt, please.

But it is a beautiful fabric, with a lively subtle sheen and a beautiful drape. It takes dyes in rich deep colours.

That is all I know about it. Its secrets have a tighter security than Trudeau and Nixon at Terre des Hommes.

According to the latest bulletin the

nylon people are hoping to make a fabric with the comfort and good qualities of cotton. This fabric I want!

What is Happening to the Natural Fibres?

Look at this table! Illuminating, isn't it? By the way, the discrepancy in the sum total is due to the rounding out of fractions to the nearest whole number.

World Production of the Major Textile Fibres (1968)

Man-Made Fibres

Acetates	2%
Rayons	18%
Nylon	7 1/2%
Polyesters (Terylene, Fortrel, Dacron,)	6%
Acrylics (Orlon, Creslan, Acrilan, etc.)	3%
Glass Fibres	1% 37 1/2%

Natural Fibres

Cotton	56%
Wool	7 1/2%
Silk	1/5% 64%

Why Borax in Synthetic Detergents?

Borax is a mild alkali. My friends tell me that I am too, too mysteriously scientific, so I shall explain. Alkalies are chemicals which have the nasty little habit of damaging wool. There is a story of a stoical Roman boy who stole a fox but was caught. He hid the fox under his tunic and stoutly denied his guilt while all the time the fox gnawed away at his vitals. Now the vital part of wool is a small section of the molecule where two atoms of sulphur join together and then to the rest of the wool substance. Alkalies can gnaw the sulphurs as secretly as the fox causing the wool to lose its strength, just as I imagine the boy did.

But borax is very mild, it has little power to gnaw the sulphurs apart. In the good old days, before synthetic detergents were invented, women when washing woolens, added borax to hard water before they added the soap. The borax protected the soap. It prevented



Student making her own fashions.

the hardness in the water from tying itself up with the soap to produce that sticky, greasy mass found in bath tub rings. Thus wool could be washed safely and without the greasy mass which would coat it, making it hard, dull and even smelly.

Why borax is added to synthetic detergents I do not know. Synthetic detergents sneer at hard water, they do not form greasy masses in hard water. So borax is not needed here. And it has practically no power to help remove dirt!

What do the Enzymes in Detergents Do?

These are proteolytic enzymes. They digest the protein in stains from milk.

meat juice, blood, egg and mucous, making it soluble. We have the same enzymes in our digestive systems to digest our roast beef and fried eggs.

The enzymes are useful, especially for old, set stains, on which they work slowly but surely. That is why the box tops recommend soaking for several hours or even overnight. But they cannot digest any stain except the proteins.

The easy method of getting rid of protein stains is to soak them in cold water; fifteen minutes, half an hour, two hours. For handkerchiefs add a little salt to the water. After soaking, rub them gently. The stain, or the protein part of it, will disappear. Then wash in the ordinary way. In a few cases the coloured part of the stain, which is not protein, must be bleached out.

Why the Fishy Smell on Cottons?

We want cottons that are crease resistant, wash-and-wear, durable press. The answer is synthetic resin and the cheapest synthetic resin is urea-formaldehyde.

Urea is a white powder without any odor. Formaldehyde is more common. Small boys use it to preserve their precious frogs and caterpillars. It has a sharp odour and it causes eyes to water and throats to smart. The manufacturer dissolves these in water and saturates the cloth. Then he applies heat. The urea and the formaldehyde are very friendly to each other. They catch each other's chemical hands in a sort of endless merry-go-round (—urea-formaldehyde — urea-formaldehyde, urea-formaldehyde —) and form a mesh all over the surface of the fibre and inside it too. The cotton can be crushed, but when the pressure is removed, the urea-formaldehyde mesh springs back to its original form and out go the wrinkles.

The urea-formaldehyde resin has no odour either, but, as you can see, equal parts of urea and formaldehyde are needed for the resin. If there is a mistake and too much of one or the other is added, there is trouble. Urea, when only partly tied to formaldehyde, slowly develops a fishy odor. The manufacturer may not know but the consumer does. Free formaldehyde may not show its evil little self until a hot iron is set on the cloth, when eyes stream tears and nostrils smart. Fortunately, laundering will remove both, although the formaldehyde may persist for some time.

the existence of The Quebec Fertilizers, Inc., and its activities in the specific field of soils, crops and their fertilization.

CONCLUSIONS

Each member of Les Engrais Chimiques du Québec, Inc., has a role to play in the agricultural economy of Quebec. May they play it their way for their own good and that of their clients and employees. Very well.

But once in a while, they should leave the commercial sector for that of extension or information and it is within the heart of the Association that they do so. Industry as such has a role in extension or information. Its personnel, whose function is to inform or even train its clientele in a very particular production field must also be able to evolve in the management and programming field. The Association becomes for its members a kind of window through which they can take a look at other disciplines all meant for the same man: the farmer.

You are undoubtedly aware of the problems encountered by industry today in the search for qualified personnel to replace those lost through death, or choice of another agronomic career.

Maybe it is a sort of recognition of the quality of the system in that our personnel is so highly regarded. However, it is greatly regretted when these people leave us.

In this line of thought, let me express the wish for the kind of meetings at which we could bring to agricultural counsellors modern and sure knowledge in fertilization, and where they could tell us of their needs and those of their producers. These meetings, now more easily achieved owing to the new setting of the Department of Agriculture and Colonization, could, for the same reasons, become more efficient. And for ourselves, new structures would permit the Comité Agronomique to build a better fertilization policy in order to be in a better position to do the necessary extension.

“Ce que l'on sait bien s'énonce clairement
Et les mots pour le dire arrivent aisément”

It may be an old saying but one that will always be true. To teach others a true fertilization theory, we must master it ourselves.

Thanks to all of those who help us acquire this knowledge and diffuse it.

It is the purpose of Les Engrais Chimiques du Québec, Inc.”

the agronomist in a changing agricultural community

(Continued)

counselling with a jeering incredulous smile.

On one hand, we have the farmer, and on the other, we have those who have taught him by every means available the importance of an economic and efficient production. We have shown him which factors he should control in order to produce more with the same area of land, and thus reduce his per unit production costs.

We hardly have time to see some results of this work, when some new problem comes along. We are already faced with surpluses...And yet, we are told that millions of dollars are being spent to find protein in petroleum and from the seas. We are told that millions of human beings will not even have a simple snack to eat today...and yet...we should reduce our production...there are quotas...

Should we advise the farmer to give up part of his efficiency which he developed by making better use of good seeds, chemical fertilizers, pesticides, equipment and knowledge we made available for him? Should he regress because he produces too much and too well? Would it be more profitable for him to produce more reducing his unit cost, achieving a profit by only selling part of his production? Or produce less at higher costs to realize the same profit by selling his total production? Is it possible that progress and production no longer go together? It is through this maze of odd situations and obvious contradictions that you and I have to flounder when we meet the farmer in the field each day. Thus have the bonds of sympathy been forged by our daily routine. A concern for personal professional competence will serve to do the welding.

All the fore-mentioned phenomena explain our programs, our politics, our subjects, our visits. All of this explains

Macdonald Reports

summer school for teachers at macdonald college



*G. W. E. McElm,
Associate Director
of Continuing Education,
and Director of
Summer School
for teachers*

The Faculty of Education of McGill University in cooperation with the Quebec Department of Education is sponsoring a Summer School for Teachers. Some 800 teachers arrived on the campus at the beginning of July for this session. The program includes this year such things as:

Team Teaching, Reading Programmes, Kindergarten, Physical Education as well as academic and Graduate courses.

As for the Graduates programmes, the faculty of Education offers a range of masters degrees and one doctoral programme. The Masters' degrees are designated either M.A. or M.Ed. The M.A. degrees have a research emphasis and are designed to help students to discover what research findings and intellectual enquiry have to contribute towards an understanding of the particular areas of education they have chosen to study. The degree is completed by writing a thesis.

The doctoral degree in the Faculty of Education is at present only offered in the field of Counsellor Education. A requirement for the programme is the Faculty's M. Ed. in Counsellor Education.

Of special interest, it seems is the Team Teaching that the Summer School for Teachers offers as a two-week workshop. The coordinator for the Team Teaching in the elementary school this year is Mrs. Margaret Clark of Lexington, Massachusetts. Other members of the team are Miss Barbara Palermo and Professor Robert Gardner.

Professor Gordon McElroy from the Faculty of Education is the Director of this Summer School for Teachers. Prof. McElroy is also Associate Director of the Centre for Continuing Education at Macdonald College.

agricultural engineering consulting service

The scarcity of labour on Canadian Farms is increasing from year to year, at a much faster rate than the availability of Agricultural Engineers to de-

sign structures and systems for more efficient utilization of the labour remaining on these farms.

A large percentage of the available professional Agricultural Engineers in Quebec are located on University campuses and much information has been given by professors to individual farmers, groups of farmers, and professionals of other disciplines on a free basis. The requests for information have reached such dimensions that the Agricultural Engineering Department at Macdonald College has found it necessary to add to its staff in order to answer the demand and relieve its professors to allow them to devote their efforts to teaching and research.

The new service is known as A.E.C.S. (Agricultural Engineering Consulting Service) and is financed from funds acquired from fees charged for services and based on current rates as recognized by the Corporation of Engineers of Quebec and the Corporation of Agrologists of Quebec.

A.E.C.S. will offer assistance to farmers and Agri-business in areas where government services are overburdened or non-existent because of lack of personnel.

These areas are:

Irrigation and frost protection
Soil drainage
Farmstead Engineering
Materials handling
Structures and animal environment
Selection of machinery
Crop drying and storage
Water supply and management and
Waste disposal

Whenever an existing government service or commercial agency is equipped to service a request, a recommendation for referral is made.

The Agricultural Engineering Consulting Service is currently under the supervision of Pierre J. Jutras, Associate Professor of Engineering.

three-day-old lambs adjust well to weaning:

Dr. G.J.B. Risson, Department de Zootechnie, Université Laval in cooperation with Dr. J.P. Lemay of the same institution conducted an experiment with lambs to determine the effects of early weaning:

Weaning lambs at three days of age and rearing them artificially offers several advantages in a program of intensive

sive sheep production. With this in mind, an experiment was conducted to compare weaning at three days or 15 days of age, and to test liquid milk diets containing the same amount of proteins (31 percent on dry matter basis) but having different energy levels (4.7 or 5.3 kilocalories per gram). The diets were essentially based on skim milk powder for proteins, and on cream for the higher-energy diet. The reconstituted milk containing 15 percent total solids at a temperature near 90°F. was offered to the lambs four times per day. Sixty-four crossbred lambs were used for this test.

The lambs weaned at three days of age learned quickly to take milk under artificial feeding conditions and showed no check in growth rate due to weaning. The lambs weaned at 15 days of age took longer to get accustomed to the artificial feeding conditions, and this resulted in some growth depression at weaning time. For best results, therefore it would be preferable to wean very soon after birth (three to five days).

When the lambs reached eight weeks of age, those consuming the lower-energy diet had gained 238 grams per day, compared with 255 grams for the group on the higher-energy diet. The former consumed 1.31 kilograms of dry matter for each kilogram of body weight gain, compared with 1.14 kilograms for the latter. When the lambs reached 25 kilograms (50-55 pounds) they were slaughtered and graded. Carcass yield was higher for the group on the higher-energy diet (56 percent vs 53 percent). Furthermore, 33 percent of the carcasses graded A from the group consuming the higher-energy diet, compared with only 15 percent for the other group.

From this work, it is evident that lambs can easily be weaned at three days of age and that a rapid rate of gain can be obtained under artificial feeding conditions. These findings may have very important practical implications in the sheep raising industry of Canada because they show that production can be greatly intensified, as it has been for other types of meat production.

cheddar cheese exports

The Canadian Dairy Commission announced the following consultations with British authorities, it will control sales of cheddar cheese to British

buyers in the present year. Arrangements have also been made between Britain and other supplying countries to control cheddar cheese exports to that market.

The British cheddar cheese market has been depressed over the past year as a result of heavy imports. The arrangements which have now been made are designed to permit a return to more normal market conditions.

The arrangement provides for the sale of 29 million pounds of Canadian cheese between April 1, 1969, and March 31, 1970. This is approximately five per cent less than the average annual exports from 1965-66 to 1967-68.

The understanding will be implemented on the Canadian side by the

Commission providing export assistance up to the agreed volume, which will be allocated among exporting firms in proportion to the export sales of each over the past three years according to the Canadian Dairy Commission.



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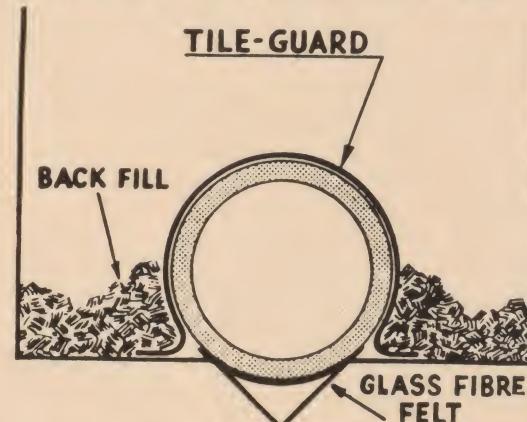
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THE FAMILY FARM

PUBLISHED IN THE INTERESTS OF THE FARMERS OF THE PROVINCE BY
THE QUEBEC DEPARTMENT OF AGRICULTURE AND COLONIZATION

Compiled by
Tom Pickup
Information Service,
Quebec Department of
Agriculture and Colonization

Photographs by
Office du Film du Québec

rop testing programme for beef cattle on the farm



Beef cattle on the farm of Mr. J.M. Tremblay at Grande-Baie, Chicoutimi.

A) PURPOSE

The Department of Agriculture and Colonization seeks to improve beef-cattle breeding in the province of Quebec by providing all cattlemen concerned with an opportunity to test the performance of their animals.

This policy is in conformity with the Canadian ROP program for beef cattle.

B) ASSISTANCE

The Department offers all raisers of beef cattle the necessary technical help. A livestock specialist will give advice and assistance at the official weighings at the start and finish of the test.

C) CONDITIONS OF ADMISSION

The breeder must have a herd of not less than 10 cows, and at least 5 calves (male or female) sired by the same bull and born within 90 days of one another. He must give all his calves the same treatment prior to weaning.

D) FACILITIES

The breeder must make available to the livestock specialist the equipment needed for weighing the animals.

E) CALVES

All members of a group of calves which is put on test before weaning must have been born within 90 days of one another and must be treated alike up to weaning. They may range in age from 45 days younger to 45 days older than the average for the group and must all be weaned on the date when their average age comes closest to 205 days. The optimum range in age

would be from 160 days old to 250 days old, but some deviation from these limits may be allowed provided that all the calves were born within a period of 90 days.

All calves in groups undergoing testing after weaning must receive identical treatment and feeding during a period of 168 days. Calves excluded prior to weaning because of difference in age or treatment may be admitted after weaning if they are weaned on the same day and receive the same feed as the other calves in the group.

No nurse cows or calves fed by foster mothers will be accepted. This assistance policy is subject to the rules of the Canadian ROP program for beef cattle.

No nurse cows or calves fed by foster mothers will be accepted.

This assistance policy is subject to the rules of the Canadian ROP program for beef cattle.

These regulations will remain in force until further notice.

promising start for eastern quebec sheep breeder's association

The Eastern Quebec Sheep Breeders' Association which was founded in June at Rimouski already has about fifty members and expects to have considerably more before the end of

this year according to Mr. Paul Plourde, livestock specialist for the Lower St. Lawrence and Gaspé region.

In making this first assessment of the project, which he is largely responsible for, Mr. Plourde said that the association meets a real need on the part of sheep breeders in the region.

The association was founded on June 18th following six meetings held by a group of sheep raisers and an information tour of the area. It is intended to give fresh impetus and direction to sheep rearing, discover its real needs, set up a realistic programme and help the members to achieve their aims.

The organization has a president, vice-president, five directors and a temporary secretary. Its members are sheep raiser in the counties of Gaspé North, Gaspé South, Matane, Matapedia, Bonaventure, Rimouski, Rivière-du-Loup, Témiscouata, Kamouraska, and the Magdalen Islands.

Recent estimates put the number of farmers who raise sheep in the region at over 2,000. The size of the flocks varies considerably: one farmer reported 500 head; nine had between 123 and 177; 51 had 78 to 122; 47 had 63 to 77; 103 had 48 to 62; 245 had 33 to 47; and 553 kept 18 to 32.

The Lower St. Lawrence and Gaspé region is the biggest of Quebec's twelve agricultural districts and is the object of extensive studies and projects started two years ago under the ARDA agreements. In 1966, almost half of the market lamb raised in Quebec came from this region whose other principal farm products are milk, hogs, and (in Rivière-du-Loup) seed potatoes.

nearly 10,000 acres of sugar beet in quebec this year

The total area in sugar beets in Quebec this year is estimated at around 9,700 acres according to Mr. Léo Filion, director of the Quebec Sugar Refinery, a Crown corporation with its factory at St-Hilaire near Montreal.

Mr Filion said that the number of sugar beet growers this year is about 875. These figures are slightly lower than those for last season, which was considered to be an exceptional one.



A young Holstein bull belonging to Mr. Laurent Gauthier of St-Thomas D'Aquin, St-Hyacinthe.

aid for the quebec purebred beef cattle breeders' association

PURPOSE

In view of the importance of purebred cattle breeding and the need for an increasing number of breeders who are fully participating members of active breed associations;

and considering the need for purebred cattle breeders' associations actively engaged in recruiting and instructing elite breeders who use the best methods of breeding and improvement;

and seeing that this association is not a profit-seeking body and thus cannot, unaided, be sure of obtaining the funds required to administer its organization and provide breeders with the services they should have.

the Department of Agriculture and Colonization is pleased to grant financial assistance to the Quebec Purebred Beef Cattle Breeders' Association to enable it to fulfil its role more effectively, on the following terms and conditions:

REQUIREMENTS

1. In order to qualify for an annual grant of \$10,000 the Association must have a least 100 regular members and employ a full-time secretary-fieldman.

2. When the Association has over 500 regular members, it will be eligible

for an additional grant of \$8,000 a year to employ a fieldman.

3. When the Association has at least 1,000 regular members, a further grant of \$5,000 may be made to enable it to engage a second fieldman.

4. A regular member means any breeder of purebred beef cattle who has paid his annual membership fee to the parent association.

To qualify for these benefits, the association concerned must produce:

a. a report of its activities showing, with documentary confirmation from the parent association, the number of regular members;

b. an official report of its financial operations.

For the above-mentioned purposes, an operating year or year of activities shall coincide with the calendar year.

aid for breeders collaborating in the testing of dairy bulls owned by the quebec artificial insemination centre

A — PURPOSE:

In view of the importance of using for artificial insemination only bulls which have been well tested and have proved outstanding in comparison with their contemporaries, and considering the potential influence of such bulls on the improvement of dairy herds, the

Department of Agriculture and Colonization desires to hasten their testing in order to increase the number of such bulls available to Quebec farmers as quickly as possible.

Special aid is therefore payable to breeders of purebred dairy cattle who collaborate in the Quebec Artificial Insemination Centre's progeny-testing programme for evaluating young bulls.

The assistance consists in the payment of \$3 for each first insemination made with semen from a designated young bull during a period set by the Quebec Artificial Insemination Centre.

Breeders may obtain a list of the bulls which are subsidizable during a given period by applying to the local inseminator or regional livestock technicians.

B — CONDITIONS:

1. To qualify for this aid, the farmer must be a breeder of purebred dairy cattle and **carry out R.O.P. testing in his herd**;

2. Only inseminations of purebred females will be subsidized;

3. This aid applies only to inseminations which are considered to be first inseminations.

C — MODE OF PAYMENT:

Breeding certificates will be checked by the Quebec A.I. Centre. Breeders cooperating in this programme will receive a quarterly cheque for the number of inseminations meeting the foregoing requirements.

Requests for further information should be addressed to the Quebec Artificial Insemination Centre, Box 518, St-Hyacinthe.

farmers urged to apply now for permits to make subsidized purchases of lime

Farmers planning to spread lime on their land this season who wish to take advantage of government grants to buy and transport it are urged to apply to their local agricultural office for a permit as soon as possible. The same applies to the truckers who will transport the lime.

Mr. Noël-Yvon Fortin, head of the calcareous amendments section of the Quebec department of Agriculture and Colonization's farm development division, says that this precaution will pre-

vent troublesome delays, most of which affect the farmer himself.

Since the new ruling calling for permits for the subsidized purchase or transport of lime came into force, many farmers and truckers have neglected to apply for them in advance and this has led to unavoidable delays in issuing them. The permits are among measures intended to protect all those engaged in producing, transporting, and buying agricultural lime — three steps in an extensive soil improvement programme which are subsidized by the Department of Agriculture and Colonization.

Mr. Fortin also points out that payment of subsidies is often delayed because bills for fertilizer keep arriving at the department without having been signed by the seller or re-seller. In order to hasten payment of grants to farmers under the programme, the department asks everyone concerned to make sure that all papers needed to obtain the grants are made out properly.

103 rams enrolled for performance testing at St-Hyacinthe

A total of 103 animals have been enrolled for the first of the ROP tests for rams now being carried out, for the time being, at the St-Hyacinthe beef bull testing station. Seven of the rams are Hampshires, 25 North Country Cheviots, 19 Suffolk, 23 Oxford, and 29 Leicester.

The aim of the programme — the first of its kind in Quebec — is to give sheep raisers an accurate idea of their rams' growth rate and, through progeny testing, of their flock sires' capacity to pass on the ability to make fast, economic gains to their offspring.

The present test was started after a period of 10 to 14 days to let the animals get adjusted. It will continue till they weigh 100 pounds for 84 days. Following the test, the station will issue certificates showing each animal's average daily gain and its rating in comparison with others of the same breed.

mechanical pitting used to drain soil at les buissons research station

A new method of land drainage is proving effective and very cheap at Les Buissons research station. It consists of making holes six inches across and two and a half feet deep in the soil and filling them with gravel. Excess water in the spring and fall drains away easily by trickling through the gravel. Thirteen acres of land are being drained by this system at the station, which is directed by Dr. Gilbert Banville.

Des Outardes type soils in the area, which contain a high percentage of clay and silt, are not adequately drained by ordinary methods and are still waterlogged in late spring. Drainage by mechanical pitting at the rate of 64 of these holes to the acre (one every 25 feet) is then resorted to.

Reckoning the man-hours, machinery, and cost of transporting gravel, this method would cost about \$50 an acre — as compared with \$200 to \$300 an acre by the usual methods.

soil mapping continues in quebec

Two soil reports were published by the soils division of the Quebec Department of Agriculture and Colonization's Research and Education Service during the 1968-1969 fiscal year. One report was for the counties of Montmagny and Bellechasse and the other was for the Magdalen Islands.

Two more reports — for St-Maurice county and the Trois-Rivières region, and for the counties of Champlain and Laviotte will be published about the middle of August.

This information is contained in a review of the soils division's pedagogical section. The review is part of a detailed account of the work and results of the soils division's five sections for the year ending March 31st 1968.

It is believed that the soil classifications in the reports will provide agronomists, foresters, engineers, and geolo-

gists with essential data for soil and land use planning.

In addition to detailed maps, each soil report has three parts: a general description of the region, a composite study of the total environment, and a consideration of the agricultural significance of the basic information contained in the map and the first two parts.

The review reveals that seven more soil reports are being prepared — for the counties of Dorchester, Portneuf, and Charlevois; Temiscouata and the Chicoutimi region; the Ile d'Orléans; Ile-aux-Goules; and Lac-des-Commissionnaires. The last-named report will be appended to the soil report for the Lake St.John region which has already been published. In addition, preliminary surveys for soil maps of Quebec and Montmorency counties were carried out during the whole of last summer.



The Holstein herd of Mr. Stanley Holmes at West Barnston, Stanstead county, in agricultural region 5.

late blight warning service for quebec potato growers

Potato growers in Quebec will be given warning of likely infestations of their crops by late blight in July, August and September and will be notified of the dates when treatments should be applied against the disease.

The information will be given in weekly bulletins during the CBC farm broadcast. The bulletins will also be mailed to regional agricultural coordinators and representatives, potato specialists, and managers of cooperatives.

The system for predicting dates of treatments was worked out by Dr. Thomas Simard, plant pathologist with the Quebec Department of Agriculture and Colonization's Information and Research division, and is based on temperature and rainfall. A day when the temperature does not go below 45°F and during which the rainfall, added to that of the 9 preceding days, totals or exceeds 1.2 inches is considered conducive to the spread of late blight. After 10 such days in a row, the disease can be expected to appear within the next 7 to 14 days.

The necessary data for making these predictions is compiled at Montreal from readings supplied by 25 weather stations in different parts of Quebec.

agricultural region 5

Names, location, territories and telephone numbers of the Department of Agriculture and Colonization's staff in the counties of Brome, Compton, Richmond, Shefford, Sherbrooke, Stanstead, and Wolfe.

Regional Office: Bourque Boulevard, Rock Forest, Sherbrooke county; telephone 569-5153 Regional coordinator: Léonel Bombardier

Administration: Guy Dugré

Technical personnel

Farm management, Raymond Laflamme; Farm credit, Alphonse Pélquin; Veterinary medicine Paul Archambault, D.V.M.; Economics, Jacques A. Martin; Extension, Zénon Bergeron; Field crops, Lionel Lachance; Horticulture, Roméo Pronovost; Livestock, J.A. Lambert and Y. Charland; Poultry, Jules Brosseau; Agricultural engineering, Domestic science, Irène Caron-Tardif; Young farmers, Crop insurance, Robert Boisvert; Dairy products, Laval Tibodeau, inspector; Food hygiene, Paul Alain, Albert Côté, R. Laroche, J.P. Lemieux, inspectors; Two clerks and 6 stenographers.

Regional agricultural laboratory:

Bourque Boulevard, Rock Forest, 569-9838; Director: Dr. Raymond Belavance, D.V.M.; Chemist: Jean Guillebeau.

LOCAL OFFICES

BROME

Office: Maple Street, Knowlton, 243-5558;

Staff: David Shufelt, Territory, Bolton and Potton townships; 11 stenographer.

COMPTON

Office: Provincial Building, Box 128, Cookshire, 875-3314; Administration: Roméo Goyette, Hervé Grenier.

Staff: Antoine Madier, East Angus, Martinville, Sandhill, Bulwer, Johnville, Birkton, Eaton, Sawyerville, Clifton, St-Isidore, St-Malo; D.J. MacMillan, Bury, Gould, Newport, Tingwick, Scotstown, La Patrie, Charierville; 1 stenographer.

RICHMOND

Office: 148 Main Street, Box 70, Richmond, 826-2477. Administration: Noel Boissinot, Albert Sawyer.

Staff: André Bussières, Bertrand Philippe, Asbestos, Cleveland, St-Georges, St-Claude, Windsor, Melbourne, St-François, Brompton, St-Denis, Racine.

Other personnel: Noel Lapierre, veterinarian, 1 stenographer.

SHEFFORD

Office: 308 Main Street, Box 55, Granby, 378-7943. Administration:

René Berthelot, Adrien Guenette.

Staff: André Choinière, Granby, St-Alphonse, Adamsville, Farnham, Brigham; Paul St-Loup, St-Valérien, Ste-Cécile, Roxton; Evariste Breton, Roxton Falls, St-Joachim, Shefford, Waterloo, Roxton; Gustave Caron, Bethany, Ely, Valcourt, Stukely, South Stukely, Ste-Anne.

Other personnel: Noel Brosseau, veterinarian; C.E. Beaudry, veterinarian; Armand Guillotte, veterinarian; J.Marc Leamy, Farm Credit; L. Rodrigue, inspector, dairy products; Nil Lambert, inspector, maple products; W. Lambert, inspector, honey. Food hygiene inspectors: P. Denault, L. Courchesne, J.G. Laforest, 2 stenographers.

SHERBROOKE

Office: Bourque Boulevard, Rock Forest, 569-2838. Administration: Joseph Lamontagne.

Staff: Roland Duperron, Stoke, Bromptonville, Ascot North, Ascot Corner, Rock Forest, St-Elie, Ordord, Magog, Ste-Catherine, Hatley, Yvan Charland, Lennoxville, Huntingville, Compton, North Hatley, Martinville.

Other personnel: Luc Hardy, Farm Credit; Irénée Rivard, technologist (Horticulture); Gustave Faniel, D.V.M.; J.Pierre Asselin, D.V.M.; C. Mongeau, Dairy plant inspector; 2 stenographers.

STANSTEAD

Office: 71 Wellington Street, Box 1048, Coaticook, 849-2624. Administration: Dave Nicholson.

Staff: Narcisse Dery, Barnston, Barnston West, Stanstead, Stanstead East, Ogden, Paquette, Hereford, Hereford East, St-Herménégilde, Dixville, Ste-Edwidge. 1 stenographer.

WOLFE

Office: 1003 Champlain, Box 99, Disraeli, 449-2828. Administration: Clément Fortier, Léo Dumont.

Staff: Wilfrid Blais, Stratford, Price, Disraeli, Nortby, Garthby, Sanborn, St-Fortinat, Wolftown, Notre-Dame, Ham North, Wotton, St-Camille, St-Adolphe, Bishopston, Seendon, Ham South, St-Adrien, Fontainebleau.

Other personnel: Gilles Rivard, veterinarian (Wotton), 1 stenographer.



Ploughing on the farm of Mr. J. Cossette at St-Prosper in Champlain county.

payment of aid to buy and transport fertilizers hastened

In order to speed up payments to farmers under the assistance policy for the purchase and transport of commercial fertilizer, the Department of Agriculture and Colonization's Farm Development Service — through its lime and fertilizer division — has issued new instructions for claiming the grant.

The old forms have been replaced by a claims form which fertilizer dealers may obtain from the Department of Agriculture and Colonization's regional or local offices. Four copies of this form must be filled in and signed by the dealer and the farmer. The farmer will then submit this form together with the documents which must accompany his claim, namely the receipted original of the purchase invoice or other satisfactory proof of payment, and a declaration justifying the claim.

A new ruling will henceforth prevent the wife or son of a farmer who has benefited from the subsidy from claiming further grants for the purchase or transport of fertilizer.

The amounts of the grants remain unchanged at 30 per cent of the purchase price of fertilizers (excluding liquid formulas) up to a limit of \$100 per farming unit (i.e. per farmer). Grants for transportation vary with distance. The present assistance policy applies to purchases and shipments made between July 1st 1969 and June 30th 1969.

performance testing of beef bulls to be continued at St-Hyacinthe

The St-Hyacinthe Livestock testing centre will hold its second series of ROP tests for beef bulls from November 1969 to April 1970. If there are enough requests from breeders, a third series will be started in May 1970 for animals born in September, October, and November 1969.

The decision to give beef breeders a third chance to have their prospective herd-sires' weight-gaining capacity tested was made by the advisory committee responsible for drawing up and applying the rules of the provincial beef-bull testing station. A letter to this effect with an entry form and a copy of the corresponding assistance policy have been sent to as many raisers of purebred beef cattle as possible. If there is sufficient response, the third test will run approximately from May to October 1970.

The rules will be the same as for the first two tests. Bulls must be purebred, but an exception is made in the case of Charolais bulls, which must have at least seven eights Charolais blood. The testing station is located at the Sy-Hyacinthe Artificial Insemination Centre and operated by the Quebec Department of Agriculture and Colonization.

Women's Institutes

The June '69 Macdonald Journal has elicited considerable response from the Quebec Women's Institutes. Several letters were received agreeing with the editorial. While the objective of the editorial was not to irritate, it was intended to help the Q.W.I. face some realities, the realization of which could form the basis for new vigour. On this basis, the editorial was partially successful in achieving its objective.

As a guide to any further discussions at the W.I. branch level, the editorial and the reply from the Q.W.I. follow.

For home and country?

THIS MONTH, as every June for the past fifty-five years, the annual convention of the Quebec Women's Institutes will be held on the Macdonald College campus. Barring any unforeseen national disasters and providing the strawberry picking season is a week behind schedule, several hundred women will take time to renew acquaintances and make plans for the coming year.

This is a crucial year in the history of the Quebec Women's Institutes, a year when every delegate should make every effort to attend. As an interested spectator there are several issues which Q.W.I. members must face. If they do, then they can start planning for their 60th. convention. If they do not, then they might as well pack their files and send them to the National Archives. For making such blunt statements, in the past I have been called a "young whipper-snapper" and various other honorary titles which one prefers to forget. Nevertheless, in the interests of a strong Women's Institute, in the interests of a viable rural community and in the interest of open channels of communication it is essential that the Q.W.I. face several issues.

Issue #1: What is the role of a predominately English-speaking women's organization in a predominately French-speaking Quebec?

To some, being a minority of a minority group is sufficient reason to cease to be. To most groups however, the degree of minority feeling is the basis for organized action. In so many cases, the strong voices of a few come through louder and clearer than the combined voices of many. Never before in the history of this province has there been such a need for organizations representative of minority groups to state their policies with respect to the various political issues that face a developing society. Never before has there been such a need for open lines of communication among the various community groups and the government. Never before has there been such a need for consult-

ative and advisory relations between organized groups and the government. The Women's Institute is the only rural woman's organization in Quebec that is non-sectarian. It is the only milieu where English and French, Protestants, Catholics and others can get together in a productive atmosphere. Recent research in Hudson Heights supports the value of W.I. in total community work. It was the only organization that cut across religious, language and social class division lines in the entire community of over fifty organizations. A strong Quebec Women's Institute is needed now more than ever before. It has an important rôle to play in Quebec — 1969.

Issue #2: What should be the relationship of the Q.W.I. to other groups in the province? At the present time, there is little if any communication between the Q.W.I. and farm organizations. This must change. The Quebec Farmers' Association, the Quebec Women's Institute and the Protestant Settlement Societies all have common problems and should discuss how these common problems can best be solved. The Q.W.I. must strengthen its ties with such groups as the Consumers Association of Canada and the Cercles des Fermières. The Q.W.I. Board should consider regionalizing their provincial organization to fit with the boundaries of regional school districts or regional agricultural districts. This regionalization should improve communication and place the decision making closer to the grass roots of the organization.

Issue #3: The Q.W.I. should focus on a more creative program planning process. In many W.I. groups the same sorts of activities are going on as have gone on for the past fifty-five years. Yet each month, in at least one group there is a real spark of creativity. The W.I. must decide if it is primarily educational or primarily social. If it is educational then time should be taken to develop a meaningful program plan with provincial guidelines and provincial objectives. To do this requires some non-involved inspiration and the support of a membership willing to change and improve.

Other provinces are doing this, Quebec W.I. groups must too if they want to keep pace with national developments. This also requires a well organized provincial office, something that has been missing for the past year. While the Quebec government has offered support for such an office in the past and may continue, an organization is extremely weak if it has to depend on outside resources for its support. In addition, the resources of Macdonald College are at the disposal of the Women's Institute groups and yet, other than at Convention time, one would hardly know the Q.W.I. exists.

It is hoped that these issues will be discussed at this month's annual convention. At the same time, other issues such as those dealing with involving younger members at the provincial executive level, must also be faced. This is a challenge to the Quebec Women's Institute to face the issues and to evaluate in terms of their provincial objectives. No other organization has such scope, ability and woman power to determine the direction of social change. The Quebec Women's Institute knows how — now lets see some action.

an open letter to the editor

In the June issue of the Macdonald Journal there appeared an editorial written by you under the headline, "For Home and Country". In this article you chose to inform the members of the Quebec Women's Institutes and also your readers from near and far of the demise of our organization if we did not act upon your advice under Issues 1, 2 and 3.

It has been suggested that your editorial was written with the sole purpose of irritating us. If so, you certainly succeeded, for an angrier delegation of women at Convention would be hard to find. It is our unanimous opinion that you neither know anything about the aims and accomplishments of our organization nor have you taken the trouble to verify your statements before giving us your unsought advice and criticism.

Issue One: What is the role of a predominately English women's organiza-

tion in a predominately French speaking Quebec. What is your role, Sir, and the role of Macdonald College in exactly similar circumstances? Ours is to maintain stability of purpose which has always been to build a solid structure of Adult Education and to raise the standard of living in home and community. Our role has changed a great deal over the years as you will discover if you read "Q.W.I. History — The First Fifty Years". We have often been referred to as the Rural Woman's University and we urged our women to become bi-lingual many years ago. We recognized the need of Adult Education and have constantly encouraged our women to be informed, useful members of the community. You seem to have failed to understand the deep bond of loyalty and affection which we hold for Macdonald College. Many of our members graduated from the College and their sons and daughters too. Throughout the years our organization has always been able to count on encouragement and support from the College whenever needed. Surely you answer your own question when you state that we have no divisive policies. Would not Governments and Nations do well to follow our example? **No restrictions as to Race, Creed or Colour.**

Issue Two: What should be the relationship of Q.W.I. to other groups in the Province?

You state that Q.W.I. must change their policy because we have no communication with other farm organizations. Many of our members attend Farmer Association meetings and I am quite sure that they play a full share whenever they are asked. However, when we are approached by either of the two organizations you mention it has not been with the idea of exchanging ideas but only with **their** need of financial assistance.

Our membership fee is kept as low as possible — \$1.00 per year — so that every woman can join without embarrassment. How about the fees in other organizations? Our membership is open to all women, regardless of Race, Creed or Colour and we gladly extend a hand of welcome and friendship to any settler, whatever country they come from. We are only too happy to learn from them as they learn from us. Many members of Cercle des Fermieres are also members of Q.W.I., especially in the north where we have two branches at least where only French is spoken at their meet-

ings.

Concerning closer co-operation with the Consumers Association of Canada, again you speak in ignorance of your subject, for Q.W.I. has worked with C.A.C. since before it was known by that name and was known as the War Time Prices and Trade Board. Our Presidents have all been Provincial Directors of C.A.C., our Past President was Provincial Chairman of Agriculture for some years and also a National Director, and our President, Mrs. McGibbon, has been a Provincial Director for four years and has just been appointed as Chairman of Agriculture. We have worked on briefs with them and many of our branches have group membership, using the Consumer Memos and Bulletins for information and discussion at their meetings. What about the part Q.W.I. played during Centennial Year in Making Canada Lovelier programmes? We sold thousands of dollars worth of tickets for Expo and our members arranged for hospitality for 1500 visitors in their homes. Most of these were overseas visitors but many came from the other provinces, especially the Western ones. One of our members served as a National Director on the Advisory Committee of the Man The Provider Pavillion at Expo '67.

Concerning regionalization of our organization, you are about two years too late in your advice, for we have been actively planning this for some time. Our only drawback in carrying out this plan is lack of personnel and the considerable work involved in drafting and new Constitution and By-Laws.

Now we come to **Issue No. Three** which concerns our programmes and office staff. Surely this is our own business which we insist **must** be kept in our own hands. Even the Government, in giving us aid, has always respected our rights in this matter and they have agreed that we are capable of continuing to do so. We are part of a National and International organization and much of our programming is streamlined to fit our own work and cannot be handed over lightly to those who think they know what is best for us. You state that an organization must be extremely weak if it has to depend on outside resources for aid. Does your department function without a grant? (Editors note: - The McGill Centre for Continuing Education which includes the Macdonald College Centre operates on a self-supporting

asis with no provincial grant.) Indeed, what would happen to Universities, Hospitals and hundreds of organizations without grants? Even C.A.C. receives a very tidy grant both at Provincial and National levels and so does the W.I. in most of our provinces. Any grant we have ever received has been used to the utmost advantage. Our assistance has been mostly as a technical or secretarial service and indeed the present Government has not epudiated our needs, but rather we are feeling the effects of an austerity programme.

We have just completed the sale of our very own book, "A Quebec Mosaic", the history of the crafts and peoples of Quebec, written by one of our own members and fully financed by our own funds. The book has been completely sold out and has won acclaim from many quarters. Have your other organizations done anything as outstanding?

Concerning the involvement of younger members, we would only be too glad to welcome them. Every organization and Church group suffers from the same complaint. We have recently heard of three Cub and Scout groups which will have to disband for lack of leaders. Sunday Schools and Youth Clubs have no leaders. People do not want to become involved. They will join but few will want the hard demanding responsibility of Leadership. Have you the answer to this problem? Many of our young women are working wives. Many of our young mothers cannot desert their children at exam time in order to attend our Conventions and many of our members are school teachers, called back to fill a great need. Do not make the mistake of thinking that all of our members are of the same age as the delegates at Convention. Many of our older members attend at very real sacrifice so that they can carry back the reports to those who are not free to spend a couple of days away from home. And make no mistake, those reports are as good or better than the ones some of the young ones write up. We have many new younger members and we feel that it is a tribute to our programmes that we have members who do not miss one meeting in a year.

We are also affiliated with the Montreal Council of Women (an organization of sixty odd associations on the Island of Montreal). We are the only rural group and we share a joint meet-

ing with them for an exchange of discussion at our Semi-Annual meetings in February of each year. This is one of our most valuable associations. It was a Women's Institute member who carried the message around the World which has resulted in the formation of Associated Country Women of the World, an organization of over seven million women.

Because of the fact that every W.I. member is also a member of this vast organization, our women are probably more informed than any other group of women. Our Presidents have all travelled widely and we are too busy building bridges of friendship around the world to be upset too long by your editorial.

We are neither a **primarily** Educational nor a **primarily** social group, but a happy combination of both, striving to attain that capacity for learning and unlearning which makes us human and also endeavouring most earnestly to draw together our homes and neighbours for the mutual benefit of each. The Quebec Women's Institutes have weathered rough seas before and we have managed to carry on quite creditably for fifty-five years and we trust that we can continue to work for Home and Country after the Sixty years you prescribe for us.

And so, Mr. Editor, we trust that you will publish this so that your readers may have a true picture of what we have done and what our future aims and objectives are. We feel strongly that we are needed as much today as we were fifty years ago but in quite a different role, and we want it known that we intend to be around for a long while yet.

of enthusiasm and a very rewarding Convention was enjoyed by all. It was with regret that we noted the absence of Mrs. Toy, our good natured pianist for many years, who unfortunately was hospitalized with a broken hip. She, along with our spirited song-leader, Mrs. Henderson, were sadly missed, but we sang with the assistance of Mrs. Hall of Dalesville whenever we had the opportunity.

Dr. H. G. Dion, Dean of the Faculty of Agriculture, extended us a rousing welcome to the College and cheered us all with these words which he asked to be placed on record: "For as long as I remain in Macdonald College, there will always be a place here for Quebec women's Institutes."

A visit from Mlle Odette Arbusa, Director of Women's Organizations at the Department of Home Economics, Quebec, with an encouraging offer of assistance wherever possible gave us

With our President and her Executive as chairmen, the business of the Convention was well taken care of and will be reported in the minutes for your perusal at a later date. Our Convenors' reports would have been fuller if only they had received their full number of reports from the counties — after all — "It's Up To You".

Mr. Baribeau, Director of Residences at Macdonald College, gave an excellent and most timely address on Parent-Student Relationship, and we are indeed fortunate to have such an understanding man in a position such as his.

The J.P. Coats Contest was most rewarding and Miss Auger assisted by Miss Edna Smith, Provincial Convenor of Home Economics, with Mrs. H. Wallace provided us with an outstanding display. Miss Auger had prepared an evaluation sheet praising wherever she could and gently advising us for the future preparation of our work for judging. Miss Auger and Miss Fran Wren of Macdonald College put in many hours at the judging.

The four plays entered in the Drama Contest were all very praiseworthy and they provided excellent entertainment for all of the delegates. We were only sorry that there was not a fourth prize for each play had considerable merit. The judge, Mr. Peter Henderson, was thoroughly enjoyed as in his incomparable manner he demonstrated the best and not quite as good parts of the plays. We all learned a great deal from his good natured evaluation.

the annual convention

The fifty-fifth Annual Convention of the Quebec Women's Institutes was held at Macdonald College, June 23rd — 25th, 1969, preceded by Executive and Board Meetings. The Theme message, It's Up To You, emphasised the fact that the responsibility concerning the future of our organization, our community and our nation rests squarely on the shoulders of each one of us. While the number of resident delegates was smaller than usual, (several car and bus loads of delegates came in for the day) there was no lack

Two films, "The Hot Rodder" with Buster Keaton and "Helicopter Canada", the latter an outstanding travelogue across Canada, with excellent colour photography were thoroughly enjoyed as were the two demonstrations. The one by Miss Barbara Hills of Dennisons Paper Company on the art of making paper flowers and other creative articles and the other by Miss Rosemary Doyle on "Facial Care" rounded out a very full Convention Programme.

The always popular Question Box and the Election of Officers brought the two day Convention to a happy ending. Our aim was "Something for Everyone" and it is hoped that your programmes will strive to attain the same goal.

Something to learn,
You are never too old.
Something to share
So your heart won't grow cold.
Get on with your business
And when all that is done,
Remember, you still have time for some fun.

The Following are the Officers of the Quebec Women's Institutes for the coming year — 1969-70:

Past President: Mrs. J. Ossington, 213 Main St., Granby; President Mrs. G. McGibbon, R.R. 2, Brownsburg; 1st Vice-President, To be appointed; 2nd Vice-President, Mrs. J. Westover, Box 295, Sutton; Treasurer, Mrs. V.R. Beattie, Richmond.

CONVENORS:

Agriculture, Mrs. Sterling Parker, Lennoxville; Citizenship, Mrs. Knox Copping, Rawdon; Education, Mrs. T.E. Gilchrist, Upper Melbourne; Home Economics, Miss Edna Smith, Lennoxville; Publicity, Miss Hilda Graham, Wyman; Welfare & Health, Mrs. James Robertson, Hemmingford.

Provincial Prize Winners in the J.P. Coats Contest:

Bed Throw — Crazy Patchwork:

1st — Mrs. J. Ossington, Shefford County; 2nd — Mrs. C. Drummond, Sherbrooke County; 3rd — Mrs. H. Robertson, Sherbrooke County.

Cushions:

1st — Mrs. W. Sutor, Sherbrooke County; 2nd — Mrs. W. Joslin, Mégantic County; 3rd — Mrs. M. Sicard, Shefford County.

Tea Cloth and Apron:

1st — Mrs. Arthur Coddington, Richmond County; 2nd — Miss Viola Moranville, Stanstead County; 3rd — Mrs. J. Ossington, Shefford County; Mrs. Victor Baird, Gaspé County.

find a three weeks holiday splendid but a six weeks holiday becomes tiresome. Four pieces of cake are not four times as pleasant as one. The intensity of any utility tends to decrease with consumption of successive units.

Even spare time is wasted. To be able to fill leisure time intelligently is the last product of civilization and at present, few people have reached this level.

Waste in business, the man in charge whether of a big industry or small stock room must learn where waste may occur, sense when it is occurring and move diligently to stop it. The ideal that inspires the formulation of the principles of efficient management at every level is elimination of waste. This is a vital function, not something tacked on to a job to be thought about now and then. Places to look — are machines and tools in good order, are schedules followed, careless workmen, purchasing scrap, intelligent handling as to turning waste into by-products, time and good planning to name a few. Orderliness is a preventative to certain kinds of waste.

Budgeting — one of the most severe indictments against management is its failure to institute an adequate system of budget control. The result is grievous waste reflected in profit and loss statements. The budget will guide toward using facilities and assets to the maximum of their potentiality, it provides a method of co-ordinating all buying and spending so as to obtain the maximum value; it acts as a safety signal, since it indicates the variance between what is wished for and what is being attained; it prevents waste.

Waste in a business or in a home implies inefficiency. The habit of being wasteful creeps into our lives; the custom of saving must be developed. Economy consists essentially in the elimination of waste and good economy consists on getting your money's worth. This is an affluent period in Canada's history, but conceivably in the luxurious estate to which we have risen should not be allowed to encourage us in riotous living. There are limits of safety and strain in the financial affairs of every business and every home. Wherever we allow waste we narrow our chances for success and we cramp our scope for enjoyment of what life offers us.

The ideal is to reach the point where we do not have to reflect whether we shall be wasteful or not, we shall be careful by habit and as a matter of course.

the inefficiency of waste

In this century people tolerate and endure waste. They are rich and think they can afford to be extravagant.

Spendthrift habits extend all the way from Government, who could cut their civil administration costs by applying strict account keeping and managerial discipline to individuals who waste even their leisure time. We spend foolish money, goods, energy, resources, time and brains. Business people need to see that competition is becoming so keen in both domestic and foreign markets that costs must be reduced. The most menacing competitor is not the other fellow in the same line of business, but waste.

Whether you are forging steel girders or shoe laces, writing cheques or dictating letters, selling automobiles or merchandising soft goods, baking a pie or mowing the lawn, there are ways to guard against waste of time, motion, material.

Elimination of waste is not something that may or may not be done. It is an economic necessity, a matter of survival. It contributes to success just as surely as does profit itself.

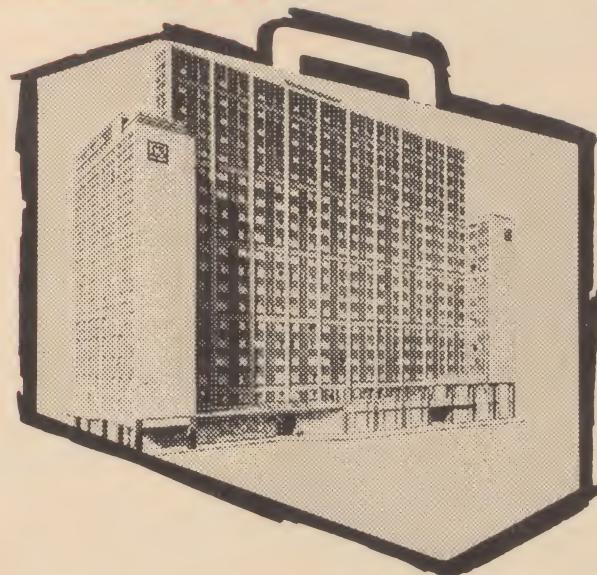
The Throw-Away Age is upon us. Its highest common factor is fashion, which increasingly seems to be the selling point. Where once quality was the only thing that mattered, women of course, have been traditionally malleable. This year's colour or neckline or hemline becomes suddenly inadequate in the thirteenth month after purchase, and must be discarded together with all the accessories of the dress. Men show their "style sense" in cars which have not changed materially since the war, but have had their fenders raised and lowered, their lights multiplied and trims changed.

Those addicted to style spending may benefit by paying attention to the law of diminishing utility. Our nerve cells lose their energy for continuous keen response to the same stimuli. We

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